other than ink, for example, dye or paint or others. Ultraviolet curing flexographic inks (available, e.g., from QureTech, Inc., Seabrook, N.H.) could be used. Also, if aluminum is used, the aluminum may be anodized to form non-conductive color as part of the metal itself.

Conductive materials such as conductive ink, dye, or paint or other conductive materials may also be used in place of non-conductive materials. The conductive materials may be applied in the same manner described for the nonconductive materials. When conductive coatings are used for color coding, the patterns of coating need not leave as much (or any) bare metal on the exterior of the armored cable sheath. For example, referring to FIGS. **30**, **31**, **32**, and **33**, a conductive coating **300** may cover the entire exterior of a sheath of an armored cable. Also, multiple colors could be used on a cable in a single pattern or a combination of patterns.

Coding of different armored cables could be done by differentiating the patterns of markings rather than the colors of the markings on the outer surface of the sheath. For example, a red striped pattern could be used for one application and a red dotted pattern for another application. The markings need not have any color but could be done in the form of patterns. Whatever visual indications are used, they should be easily distinguishable when viewed from a distance and should appear continuously or at frequent intervals along the length of the cable so that even a short length of cable will be easily identified.

Referring to FIGS. **28** and **29**, in forming the color-coded armored cable from a continuous tube **88**, the continuous tube SS is laid flat and a hook **89** with a long handle **90** is inserted through the internal passage of the tube. One end of each wire that is to be enclosed by the tube to form the finished armored cable is attached to the hook **89**, and the wires are drawn through the tube **88** by use of the handle **90**. The tube **88** may be, for example, a smooth-walled cylinder (FIG. **16**), a corrugated-wall cylinder (FIG. **19**), a smooth-walled tube having a generally rectangular transverse cross-section (FIG. **22**), or corrugated-wall tube having a generally rectangular transverse cross-section (FIG. **24**).

With the wires extending through the length of the tube **88**, the armored cable **92** (i.e., the tube **88** with the wires inside) is, e.g., rolled onto a supply spool **91**. To color and form the armored cable **92**, the cable is fed off the supply spool **91**, into an inking machine **93** (similar to the inking machine of FIG. **26**), and through a convoluting machine **94**. The convoluting machine **94** may form, e.g., convolutions, rectangular shapes, or corrugations in the exterior of the color-coded armored cable. The color-coded, convoluted (or shaped) armored cable exits the convoluting machine and is collected on a take-up spool **95**.

The inking machine **93** may be moved (as indicated by arrow **96**) to the position indicated in phantom in FIG. **29**. In its alternative position, the inking machine **93** marks the armored cable with colored ink (or dye or paint, as described previously) after it exits the convoluting machine **94** but before it is collected on the take-up spool **95**.

The continuous tube **88**, through which the wires are pulled with hook **89** and handle **90**, could already have color markings (e.g., in the form of stripes or dots) on its exterior prior to processing to form the corrugated armored cable. In this case, the inking machine **93** would not be used at all in the process of FIG. **29**.

If color-coded armored cable having a smooth wall is required, the convoluting machine **94** would be omitted and only the inking machine **93** would be used in the manufacturing process of FIG. **28**.

Referring to FIG. **26**, the marking of the helically-wound color-coded armored cable may be done after the sheath is formed by moving (as indicated by arrow **124**) the inking machine **104** to the position indicated in phantom.

Another process of forming the helically-wound color-coded armored cable is to supply metal strip already having a stripe (or some other pattern) of colored ink (or dye or paint) on one side to the profile machine **112**. This alternative process would not require an inking machine **104** to be included in the process of profiling and convoluting the metal strip around the conductor(s) **114** to form the helically-wound color-coded armored cable.

Referring to FIG. **27**, as an alternative to FIGS. **26**, during manufacture, one or more conductors **114** may be fed from the supply spool **116** through a rotating machine **103** which rotates the supply of metal strip **100**. The metal strip **100** enters the profile machine **112**, which forms the metal strip into an "S" shape (see the cross-section in FIGS. **5** and **8**), and then passes into the convoluting machine **118** which helically wraps the S-shaped metal strip around the conductor(s) **114** to form the armored cable. The armored cable enters the inking machine **104** (indicated in phantom) which selectively applies colored ink as described previously. The helically-wound, color-coded armored cable **120** exits the inking machine **104** as the finished product, and is collected on take-up spool **122**. If pre-marked metal strip is provided by the rotating machine **103**, the inking machine **104** (indicated in phantom) may be eliminated from the manufacture process of FIGS. **27**.

Referring to FIGS. **26**, **27**, and **29**, the inking machine could use "inkier" or paint sprayers to apply the colored material (e.g., ink, dye, or paint, whether conductive or non-conductive) to the metal strip instead of using the inking roll and etched roll. Also, a brush-type application instrument could be used in place of the rollers or sprayers. A constant supply of ink, dye, or paint would be supplied to the brush-type applicator during the application process. Dip pans or wipes could also be used.

What is claimed is:

**1**. An armored cable sheath comprising

a conductive tubular structure having an internal passage, an outer surface, a first end, and a second end, the internal passage being sized and configured to enclose one or more conductors, said tubular structure being made of a material having a first visual appearance, and

a pattern of visible indicia, of different visual appearance from said first visual appearance, applied on said outer surface, said pattern being repeated along the length of said sheath.

**2**. Apparatus comprising:

a tubular conductive sheath having first and second ends and inner and outer surfaces, the inner surface of the sheath defining an internal passage sized and configured to enclose one or more conductors;

visible indicia displayed on the outer surface of the sheath, the visible indicia spanning between the first and second ends of the sheath and providing the outer surface of the sheath with a visual appearance different from a visual appearance of the outer surface of the sheath without the visible indicia.

**3**. The apparatus of claim **2** wherein the visible indicia comprise a pattern.

**4**. The apparatus of claim **3** wherein the pattern repeats along the length of the sheath.

**5**. The apparatus of claim **2** wherein the visible indicia comprise color.

6. The apparatus of claim 5 wherein the visible indicia comprise red coloring.

7. The apparatus of claim 5 wherein the visible indicia comprise anodized metal.

8. The apparatus of claim 5 wherein the visible indicia comprise ink, dye, or paint.

9. The apparatus of claim 8 wherein the ink, dye, or paint is substantially non-conductive.

10. The apparatus of claim 8 wherein the ink, dye, or paint is substantially conductive.

11. The apparatus of claim 2 wherein the visible indicia are continuous between the first and second ends of the sheath.

12. The apparatus of claim 11 wherein the visible indicia comprise a stripe extending from the first end to the second end of the sheath.

13. The apparatus of claim 12 wherein the stripe traverses a helical path around the outer surface of the sheath.

14. The apparatus of claim 12 wherein the stripe substantially covers the outer surface of the sheath.

15. The apparatus of claim 14 wherein the stripe is substantially conductive.

16. The apparatus of claim 2 wherein the visible indicia are spaced apart along the length of the sheath between the first and second ends of the sheath such that regions disposed between adjacent indicia exhibit the visual appearance of the outer surface of the sheath.

17. The apparatus of claim 16 wherein the visible indicia comprise a series of spots.

18. The apparatus of claim 2 wherein the visible indicia leave at least a portion of the outer surface of the sheath exposed.

19. The apparatus of claim 18 wherein the visible indicia leave at least a portion of the first and second ends of the outer surface exposed.

20. The apparatus of claim 2 wherein the conductive sheath comprises a helically wound conductive strip forming a tubular structure with alternating crowns and valleys along the length of the sheath.

21. The apparatus of claim 20 wherein the visible indicia leave at least a portion of the outer surface of the crowns exposed.

22. The apparatus of claim 20 wherein the visible indicia leave at least a portion of the outer surface exposed where edges of the strip along the crowns contact a surface of the strip at the valleys.

23. The apparatus of claim 2 wherein the conductive sheath comprises a continuous metal tubular structure.

24. The apparatus of claim 23 wherein the outer surface of the continuous metal tubular structure is provided with alternating crowns and valleys along the length of the continuous metal tubular structure.

25. The apparatus of claim 24 wherein the crowns and valleys form a helical configuration on the outer surface of the continuous metal tubular structure.

26. The apparatus of claim 2 further comprising the one or more conductors disposed within the internal passage of the conductive sheath.

27. The apparatus of claim 26 further comprising a layer of insulation disposed between the one or more conductors and the inner wall of the sheath.

28. The apparatus of claim 27 wherein the insulation comprises paper.

29. The apparatus of claim 27 wherein the insulation comprises plastic.

30. Apparatus comprising:

a tubular conductive sheath having first and second ends and inner and outer surfaces, the inner surface of the sheath defining an internal passage sized and configured to enclose one or more conductors;

a substantially conductive coating disposed on the outer surface of the sheath, the coating having a visual appearance different from a visual appearance of the outer surface of the sheath.

31. The apparatus of claim 30 wherein the coating comprises ink, dye, or paint.

32. The apparatus of claim 30 wherein the coating comprises a pattern.

33. The apparatus of claim 32 wherein the pattern repeats along the length of the sheath.

34. The apparatus of claim 33 wherein the pattern comprises a stripe extending along the length of the sheath.

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